



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,171	06/30/2006	Gerard Marot	Serie 6482	2136
40582	7590	03/18/2008	EXAMINER	
AIR LIQUIDE Intellectual Property 2700 POST OAK BOULEVARD, SUITE 1800 HOUSTON, TX 77056			PRICE, CRAIG JAMES	
			ART UNIT	PAPER NUMBER
			3753	
			MAIL DATE	DELIVERY MODE
			03/18/2008 PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/585,171

**Applicant(s)**

MAROT ET AL.

**Examiner**

Craig Price

**Art Unit**

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 14-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date 6/30/2006
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Inventor's Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "6" and "5" have both been used to designate the central tubular element. In figures 2 and 3, it appears that "5" should be - - 52 - -. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "motor vehicle" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure

number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 18, 20 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18 recites the limitation "the sliding seal" in line 2. There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

Claim 20 is dependent on cancelled claim 6. Claim 22 is dependent on cancelled claims 4 to 7. Appropriate correction is required.

Claim 25 recites the limitation "the body". There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14, 15, 17, 19, 21, 23 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Challender et al. (5,492,147).

Regarding claim 14, Challender et al. disclose a system for connecting the ends of fluid conduits, comprising a female part (10) intended to receive a portion of a male part (20), the male and female parts each comprising a shutter (35,72) for closing the fluid conduits, which is normally closed and can be moved into the open position when the system is in the connected configuration, the male and female parts each additionally including an isolation shutter (46,94) which is normally closed and can be moved into the open position during the introduction of the male part into the female part. Challender et al. describes the male and female half in an opposite manner. The examiner has taken the position that the female half is the half in which a center supporting member such as 23 typically exists.

Regarding claim 15, Challender et al. disclose that the female part comprises a tubular guide (26) with which the male part cooperates by sliding in a leaktight manner.

Regarding claim 17, Challender et al. disclose that the male part has a central mandrel (63) comprising the closure shutter of the fluid supply conduit and engaging by sliding in the tubular guide of the female part.

Regarding claim 19, Challender et al. disclose that the tubular guide (4) of the female part comprises a second pivoting flap (46) capable of cooperating with the end of the central mandrel of the male part during the introduction of this male part into the female part.

Regarding claim 21, Challender et al. disclose that the female part comprises, in the back of the tubular guide (26), a central tubular element (23) comprising the closure shutter (35) of the fluid-receiving conduit and forming an axial stop for the male part.

Regarding claim 23, Challender et al. disclose that the end of the tubular guide (26) of the female part is able, at rest, to be closed off by a removable cap (certainly a dust cap could be placed through the flaps 46, over the guide 26).

Regarding claim 24, Challender et al. discloses that the male part (20) is configured in the form of a nozzle which can be actuated manually (the male part is in the shape of a round part which is configured in the form of a nozzle and the device can be actuated by hand).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

Art Unit: 3753

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 16, 18, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Challender et al. '147 in view of Jones (3,938,564).

Challender et al is silent to having a sliding seal on the male part and the female part is arranged within the body of a motor vehicle and that the fluid is liquid hydrogen or liquefied natural gas.

Jones discloses a coupling used for racing cars, which teaches the use of a sliding seal (36) on the end of the male part, and wherein the female part (14) is arranged within the body (2) of a motor vehicle, and wherein the fluid is liquid hydrogen or liquefied natural gas.

It would have been obvious to one of ordinary skill in the art at the time of invention to employ a sliding seal as taught by Jones into the device of Challender et al. in order to minimize the spilling of fluid when filling the vehicle.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Scheiwer (2,638,916), Anderson et al. (3,336,944), Hansel (3,734,149), Mingus et al. (3,866,638), Scholle (4,137,930), Fink, Jr. et al. (5,365,973), Brzyski et al. (5,429,155), Wong (5,634,505), Johnson (5,787,927), Minshull et al. (5,823,222), Caizza et al. (6,077,259), Tanida (6,170,522), Coates, III et al. (6,182,695), Reinholdt (6,250,348), Doyle (6,745,998), Beaulne et al. (6,805,159), Weis et al. (6,837,267) and Castro (7,117,903) all disclose similar couplings.

Art Unit: 3753

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig Price whose telephone number is (571)272-2712. The examiner can normally be reached on 7AM - 5:30PM Mon-Thurs, Increased flex time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CP  
/C. P./  
Examiner, Art Unit 3753

5 March 2008

/Ramesh Krishnamurthy/  
Primary Examiner, Art Unit 3753